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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,414	02/26/2004	Teruaki Matsushima	87900D-000519/US	2798
30593	7590	04/29/2005		
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER THOMAS, BRANDI N	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	10/786,414	MATSUSHIMA ET AL.	
	Examiner	Art Unit	
	Brandi N. Thomas	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/26/04</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u> . |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. Acknowledgement is made of receipt of Information Disclosure Statement(s) (PTO-1449) filed 2/26/04. An initialed copy is attached to this Office Action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa (6611663 B2) in view of Ihara (5886832).

Regarding claim 1, Nakagawa discloses, in figures 1-3, a lens barrel (figure 1), comprising: an inner barrel body (2) with a helicoidal screw (2a) formed, and an outer barrel body (1) with a helicoidal screw (1a) formed, which is coupled with said inner barrel body (2) by means of said helicoidal screw (1a) and a helicoidal screw (2a) formed on said inner barrel body, wherein, of the helicoidal screws (1a and 2a) formed on said outer barrel body (1) and said inner barrel body (2) but does not specifically disclose one helicoidal screw is formed on an elastic piece formed by slitting one portion of the barrel body, and said elastic piece is thrust against the other helicoidal screw by a biasing force of said elastic piece. Ihara discloses, in figures 1 and

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3, one helicoidal screw (31) is formed on an elastic piece (20) formed by slitting one portion of the barrel body (100) (col. 1, lines 21-24 and 63-65), and said elastic piece (20) is thrust against the other helicoidal screw (31) by a biasing force of said elastic piece (20) (col. 2, lines 25-30).

Regarding claim 2, Ihara discloses, in figures 1 and 3, a lens barrel, wherein there are elastic pieces (20) on said inner barrel body (100) (col. 1, lines 20-25) but does not specifically disclose a plurality of elastic pieces at predetermined intervals. However, it would have been obvious to include a plurality of elastic pieces at predetermined intervals for the purpose of maintaining a tight and secure fit of the inner and outer lens barrels for zooming the lens.

Regarding claim 3, Nakagawa discloses, in figures 1-3, a lens barrel (figure 1), comprising: an inner barrel body (2) with a helicoidal screw (2a) formed on an outside surface (figure 1), and an outer barrel body (1) with a helicoidal screw (1a) formed on an inside surface (figure 1), which accommodates said inner barrel body (2) by causing a helicoidal screw (2a) formed on said inner barrel body (2) to threadedly engage with a helicoidal screw (1a) formed on said inside surface but does not specifically disclose one helicoidal screw is formed on an elastic piece formed by slitting one portion of the barrel body, and said elastic piece is thrust against the other helicoidal screw by a biasing force of said elastic piece. Ihara discloses, in figures 1 and 3, one helicoidal screw (31) is formed on an elastic piece (20) formed by slitting one portion of the barrel body (100) (col. 1, lines 21-24 and 63-65), and said elastic piece (20) is thrust against the other helicoidal screw (31) by a biasing force of said elastic piece (20) (col. 2, lines 25-30).

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Regarding claim 4, Ihara discloses, in figures 1 and 3, a lens barrel, wherein there are elastic pieces (20) on said inner barrel body (100) (col. 1, lines 20-25) but does not specifically disclose a plurality of elastic pieces at predetermined intervals. However, it would have been obvious to include a plurality of elastic pieces at predetermined intervals for the purpose of maintaining a tight and secure fit of the inner and outer lens barrels for zooming the lens.

Regarding claim 5, Ihara discloses, in figures 1 and 3, a lens barrel, wherein said elastic piece (20) has been formed in a substantially rectangular shape (figure 3).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nomura et al. (6120865) discloses an inner barrel includes a male helicoid, and an outer barrel includes a female helicoid, which can engage with the male helicoid of the inner barrel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341.

The examiner can normally be reached on 8-5.

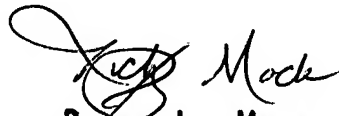
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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RICKY L. MACK
PRIMARY EXAMINER